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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,755	09/17/2001	Taro Takahashi	225-01	8898

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EXAMINER

PRATT, HELEN F

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 07/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/936,755

Applicant(s)

TAKAHASHI ET AL.

Examiner

Helen F. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-7 are indefinite in the use of the phrase "low-molecularized pectin". It is not known what is intended by this phrase. It is noted in the specification that various methods are disclosed as to how to lower the molecular weight of pectins, i. e. to hydrolyze pectins. However, as it is known in the art that there are high and low methylated pectins, it is not known to what degree of methylation the claimed pectins are intended to be or what molecular weight the pectins are intended to be.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connolly (5,607,714) in view of Akahoshi et al (5,690,975).

Connolly discloses an acidic protein food containing a low molecularized pectin (LMP), which can be a beverage (col. 4, lines 25-54). Claims 1 and 3 differ from the reference in whether the food contains a low-molecularized pectin. The pectin is

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considered to be of low molecular weight because a mixture including high methoxy pectin is mixed with fruit juice, which is generally acidic and heated to a high temperature (160 to 170 F.) and is in amount of greater than 0.4% (abstract and col. 5, lines 1-35). Since this is one of the methods used as disclosed on page 4, lines 23-36 of the specification to make a LMP, the pectin as disclosed by Connelly is considered to make a LMP absent a showing to the contrary. Therefore, it would have been obvious to make a composition containing a low-molecularized pectin in an acidic protein food as claimed.

Claims 2 and 4 differ from the reference in the particular viscosity of the solution. However, it would have been within the skill of the ordinary worker to add enough to make a particular viscosity, as this is the function of using a pectin. Therefore, it would have been obvious to use enough of a pectin material to make a particular viscosity.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akahoshi et al.

Akahoshi et al. (5,690,975) disclose a method of making a fermented milk containing blockwise-type HM pectin in which HM pectin at within the claimed amount is combined with condensed strawberry juice and water and pasteurized at 100 C. for 15 minutes, then calcium gluconate is added and this syrup is added to yogurt. (col. 11, lines 5-20). Heating at 100 C. for 15 minutes would have made a LMP as in the specification on page 4, lines 23-36. Claim 5 differs from the reference in adding a LMP to an acidic protein food. However, yogurt is considered to be an acidic food as it

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is a fermented product produced by the action of lactic acid bacteria. Therefore, it would have been obvious to add a LMP to an acidic protein food.

Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akahoshi et al. as applied to claim 5 above, and further in view of Mitchell et al. .

Claim 6 further requires the use of a non-low-molecularized pectin and the step of heating the protein containing food with the acid and pectin instead of separately. However, HM pectin is considered to be such as it has a high degree of methoxy groups. No patentable distinction is seen at this time in heating together or separately, because a low viscosity product is made (col. 12, lines 50-60 Akahoshi et al.). Also, Mitchell et al. disclose a process that makes a low-molecularized pectin by heating pectin at a temperature above 100 C to obtain a hydrolyzed polyuronic mixture (abstract), which can be used in a food product. Pectins contain polyuronic acids so that the heating of pectin is considered to be in the presence of an acid (col. 5, lines 21-34 and lines 45-60). Therefore, it would have been obvious to heat- treat pectin in the process of Akahoshi in the presence of an acid in order to reduce the levels of make a low-molecular weight pectin.

The acidic protein product is disclosed as in claims 1, 2, 3, 4, and 7 is disclosed as the product of this process. Low viscosities of the product as in claim 2 and 4 are disclosed because the reference states that the pectinic acids do not contribute to the viscosity of a food or beverage formulation (col. 5, lines 65-68 and col. 6, lines 1-2

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Mitchell et al.). Beverages are disclosed in col. 6, lines 1-2 as in claim 3. The particular amounts are seen as within the skill of the ordinary worker depending on the viscosity required. The stabilizer of claim 7, which is pectin, is disclosed as in col. 11, lines 24-35 (Mitchell et al.). Therefore, it would have been obvious to make an acidic protein food using the heated pectin of the reference at particular viscosities and in beverages and to use the heated pectin by itself to be added to a product.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al.

Takahashi et al. disclose a process of making an acidic protein food with low viscosity by heating beet pectin in an acidic solution with milk and heating the mixture to 90 C (page 4, lines 40-60, page 5, lines 1-4). Claim 6 differs from the reference in heating the pectin containing acidic food at higher than 100 C. However, as a low viscosity beverage is made, this indicates that the pectin has been hydrolyzed (specification) and no patentable distinction is seen at this time in the difference of 10 degrees in hydrolyzing pectin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 308-3959. The fax phone

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number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Hp 7-19-03

  
**HELEN PRATT**  
**PRIMARY EXAMINER**